



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

April 27, 2012

RE: Pretreatment Inspection and Notice of Violation

Ms. Lee Sanders
Honda Transmission Manufacturing
6964 State Route 235 North
Russells Point, OH 43348

Dear Ms. Sanders:

On March 19th, I met with you, several of your fellow staff members and a representative of Nalco to conduct a Pretreatment Inspection at your facility. The meeting started in a conference room where we discussed the recent zinc violations and the issue of significant non-compliance. Ted Boggs joined the conversation via conference call.

Zinc Violations

In October 2011, Honda Transmission violated its monthly average zinc limit of 460 ug/l with a measurement of 629 ug/l. In the current reporting period of January through June 2012, you notified me of two violations of the monthly average limit in January and February. A summary of the available monitoring results and average measurements are as follows:

Table with 4 columns: Date, Result (ug/l), Monthly Avg. (ug/l). Rows include data for 2011 (July-December) and 2012 (January-February), with a section for 'End of Reporting Period'.

Monitoring results after February have been much lower and are the result of increasing the target pH in the ultrafiltration feed tank (T-410) to precipitate dissolved zinc. Because Honda Transmission has been very forthcoming with its monitoring data and diligent in investigating the cause and finding a solution, no further action or response from you is necessary. However, while the remedy appears to have been very effective, there is still some question about what caused the zinc to become elevated in the influent. I encourage you to continue searching for the root source(s) so that you can better understand how zinc might be controlled. Please keep me informed of your findings.

Projected SNC for Zinc Violations

One of the significant non-compliance (SNC) criteria is called technical review criteria (TRC) which occurs when thirty-three percent (33%) or more of measurements for a parameter exceed the corresponding limit by twenty percent (20%). In the case of monthly average limits, TRC is met when at least two monthly averages in a six month period exceed the average limit by 20%. I will wait until after the DMR for the current reporting period is certified and submitted before I make this declaration to ensure no other violations need to be included with the SNC determination.

Effluent pH Analysis and pH Probe Calibrations

Please note that compliance monitoring for pH requires analysis be performed within 15 minutes of collection using a properly calibrated pH meter. To demonstrate that this requirement is being met, I suggest that you record the grab sample monitoring result on the chain of custody sheet that accompanies the composite sample sent to MASI. The date, time and name of the person (initials are acceptable) collecting and analyzing the grab sample should be noted. There is no value in having the lab analyze for pH.

On-site pH monitoring requires a demonstration that the pH meter is properly calibrated prior to analysis. This is typically done using a bound log book. In addition to recording calibrations, the log book can be where the procedures for maintaining, calibrating and operating the meter (sometimes simply the user manual) are kept.

Because it has been demonstrated that pH adjustment at the UF feed tank (T-410) is critical to compliance, I believe it is necessary to also log periodic calibrations and checks of the pH control system used to add caustic for precipitation. I recommend you consider weekly calibrations or possibly bi-weekly with a weekly check. Calibration records for both the meter used for effluent monitoring and the system for process control could be kept in one log book if desired. Please let me know how you plan to address this issue.

Reporting Split Sample Results

We previously discussed the need for you to consolidate split sample results into one value for a monitoring day instead of entering one of the split sample results on the monitoring day and the other on the day after. You have since amended your discharge

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monitoring report and are including notes indicating when measurements are calculated from two split sample results.

New and Expanded Production Processes

We discussed Honda's on-going expansion for the new continuously variable transmission (CVT) manufacturing and assembly operations that will result in additional die casting machines. I understand that there will be a new filter system for the centralized die lubricant system and that die casting wastewater flows are not expected to increase significantly with the expansion. Wastewater from cast quenching is expected to be directed to a sump and pumped directly to the wastewater pretreatment system instead of to the basement tank where current quench waters flow. Please ensure all wastewaters from new die casting operations will be quantifiable through either existing or new flow measurement systems.

Honda has consistently reported the average pounds poured per day as being well above the rate used to develop the discharge limits. Although it will likely be a while before wastewater is generated by the expanded die casting operations, it will be very important for you to provide us information on the anticipated pour rate and wastewater volumes from these expanded operations once they become better known. You will also need to identify increases in wastewater volumes from new unregulated operations. The best way to provide these updates is through a process flow schematic that identifies source operations and the flow rates, volumes, frequencies and destinations of wastewater from those operations.

Thank you for explaining your efforts to address the challenges you have faced regarding the high zinc results in detail and for showing me all of the on-going construction activity associated with the plant expansion. If you have any questions concerning this letter or the inspection form, please call me at (937) 285-6095.

Sincerely,



Matt Walbridge
Pretreatment Coordinator
Division of Surface Water

MW/tf

Enclosures

cc: Ronald Jacob, Indian Lake Sewer District
Ryan Laake, Ohio EPA/Central Office /DSW



Southwest District Office

PRETREATMENT INSPECTION REPORT

PERMIT NUMBER
1DP00009*HP

FACILITY NUMBER
OHP000075

DATE CONDUCTED
March 19, 2012

INSPECTION TYPE
I

INSPECTOR
S

FACILITY TYPE
2

TIME IN
1215

TIME OUT
1530

GENERAL INFORMATION

NAME AND LOCATION OF FACILITY

**Honda Transmission Manufacturing, Inc.
6964 State Route 235 North
Russells Point, OH 43348**

POTW RECEIVING DISCHARGE

Logan County Sewer District - Indian Lake WWTP

MAILING ADDRESS OF FACILITY

**Honda Transmission Manufacturing, Inc.
6964 State Route 235 North
Russells Point, OH 43348**

CONTACT (NAME/TITLE/PHONE/E-MAIL)

Ms. Lee Sanders / Environmental Coordinator / (937) 843-5555 x-63948 / Lee_Sanders@htm.honda.com

FACILITY EVALUATION (See Inspection letter for more complete descriptions)

(S = Satisfactory, M = Marginal, U = Unsatisfactory, NA = Not Applicable)

S	Sampling Procedures	NA	Compliance schedule requirements
M	Monitoring / Reporting	S	Notification
U	Compliance with effluent limits	-	Other -

Name and Signature of Inspector(s)

Matt Walbridge

Agency / Office / Telephone

Ohio EPA / Southwest District Office / (937) 285-6095

Date

4-27-12

Signature of Reviewer

Ohio EPA / Southwest District Office / (937) 285-6034

Date

4/30/12

INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **Honda Transmission Manufacturing, Inc.**

Date of inspection: **March 19, 2012**

Facility Number: **OHP000075**

IDP Number: **1DP00009*HP**

Facility Representatives: **Lee Sanders, Ryan Eberhart and Ken Campbell
Jeff Nobel (Nalco)**

Inspector(s): **Matt Walbridge**

COMPLIANCE

1. Date of last pretreatment inspection: **April 4, 2011**
2. Has the facility been in compliance with its permit limits since the last inspection? Y / N
If no, explain:

Violations of monthly average limit for zinc in October 2011, January & February 2012.

3. Is the facility in compliance with all other requirements?
- | | |
|--|------------|
| Sampling procedures | Y / N / NA |
| Reporting (late reporting, failure to report, etc) | Y / N / NA |
| Compliance schedules | Y / N / NA |
| Submitted BMR and 90 day compliance reports | Y / N / NA |
| Any other requirements | Y / N / NA |

If any of the above five answers is no, explain:

pH analysis was not being performed within 15 minutes of collection.

4. Was the facility required to perform any actions as a result of the last inspection? Y / N
Explain any unresolved actions:

All action items have been resolved

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: **~1,120 (~1,000 in production)** 6. Shifts/Day: **3**
7. Production Days/Year: **279** 8. Hours/shift: **8**
(Shutdown occurs during the first week in July and the week between Christmas and New Years.)
9. Any production changes since the last inspection? Y / N
If yes, explain:

Operations are said to be running smoothly since first of year. Production is full every week.

10. General facility description and operations:

Manufacture automotive transmissions and differentials. Operations include die casting, machining, shot peening, carburizing heat treatment (with oil quench and vapor degreasing), forging, heat treating and assembly.

Remanufacturing (reman) for aftermarket service includes aqueous part washing.

FACILITY OPERATIONAL CHARACTERISTICS CONTINUED

11. Any change in materials used in production since the last inspection? Y/~~N~~

If yes, explain:

Rebuild of machining Line 2 TC (previously referred to as Line 3) is now operating.

12. Any expansion or production increase expected within the next year? ~~Y~~/N

If yes, explain: **New continuously variable transmission (CVT) assembly, with ~160 employees, is expected in spring 2012. There will be no wastewater directly generated by this assembly work.**

Plans for four new die casting machines (start with two) is scheduled for end of 2012.

WASTEWATER TREATMENT

13. Provide a schematic diagram and description of the wastewater treatment system:

Wastewaters from automatic transmission and gear manufacturing combine at the existing pretreatment building and flow through two micro screen strainers. From the strainers, wastewater flows to an oil/water separator and on to an 87,000-gallon equalization tank. Floating oil is decanted from this tank. From the EQ tank wastewater is pumped to an ultra-filtration system feed tank (T-410) where pH is adjusted with caustic to approximately 9.4 to precipitate zinc. There are two banks of UF. A third UF system from the previous pretreatment system is available as a back-up system.

Permeate from the UF units flow to a collection tank where hydrogen peroxide is added prior to being pumped through a flow meter prior to discharge to the lift station serving the facility. A hydrogen peroxide feed system at the final discharge tank was added in January 2008 and continues to be used.

Oily retentate from the UF units (and oil from the separator) are discharged to oil frac tanks. The oily waste is cracked off-site and then used as fuel.

14. Was a PTI issued for the treatment system? Y/~~N~~

15. Were there any modifications to the treatment system since the previous inspection? ~~Y~~/N
(Larger caustic feed pumps installed to allow better pH control in UF feed tank where precipitation has been determined to be necessary for compliance with zinc limits. pH had been targeted at ~8 for optimal performance of the UF membranes but now it's ~9.4 for precipitation of zinc.

If yes, was a PTI obtained? ~~Y~~/N

PTI Number: Date:

16. What is the treatment mode of operation? Batch/~~Continuous~~/Combination

All of the wastewater is treated in a continuous mode. Continuous treatment occurs weekly for about 16 hours from Thursday into Friday (sometimes into Saturday).

If batch, list the frequency and duration:

17. Who is responsible for operating the treatment system?
Jeff Noble (w/ Nalco) – who continues to maintain the system in excellent condition. He is backed up by Jeremy Trail and Randy Kelton. Ken Campbell is available in a pinch.

18. How often is the treatment system checked?

Throughout each day of a 40-hour work week. When not attended by an operator, plant security guards check it using a security key system. The guards have guidance on what to look for and how to respond.

WASTEWATER TREATMENT CONTINUED

19. Is there an alarm for the system? Y / ~~N~~
Explain:

Tank level, temperature, pH and pressure. There is a level alarm on the 87,000-gallon storage tank (at the 80% full mark). Pressure alarms (automatically shuts off the UF system) and temperature alarms to ensure optimum oil separation. There is a new pH alarm at the UF feed tank (T-410). There is also an alarm for room temperature to ensure the caustic solution doesn't freeze.

20. Is there an operations and maintenance manual? Y / ~~N~~
(To be amended to address zinc removal in UF feed tank)

21. Is an inventory of critical spare parts maintained? Y / ~~N~~
If yes, list:

UF tubes, spare and redundant pumps, discharge flow meter. New set of 336 membranes are on order. The current ones are still performing well.

22. Are there any bypasses in the system? Y / ~~N~~
If yes, describe the location:

Have bypasses occurred since the last inspection? N.A. Y / ~~N~~

Was the POTW notified? N.A. Y / ~~N~~

23. Are residuals or sludges generated? Y / ~~N~~

Metal chips, oils, aluminum swarf, dross, flash, scale from forging, knockouts from stamping, spent glass beads (from peening) and steel shot. The pretreatment EQ tank is cleaned yearly (June-July). The glass beads are sent to Belden Bricks, an architectural brick maker.

Method of disposal:

Hauled off-site for recycling or, in the case of some oils, transported to a Treatment, Storage and Disposal (TSD) facility.

Frequency and amount of disposal:

Approximately 5,000 gallons of oil every three weeks with some larger events throughout the year.

Name of hauler/landfill/disposal facility:

United Solutions takes the liquids, Wabash takes the metals and Texco manages waste & recycling.

Is any sludge generated subject to RCRA regulations? (Conditionally exempt with zero lbs/year) Y / ~~N~~

If land applying sludge, is there a sludge management plan? N.A. Y / ~~N~~

PROCESS AND WASTEWATER INFORMATION

24. List all processes generating wastewater, current wastewater flows, and where applicable, production rates as well as values on which the permit limits are based:

REGULATED PROCESSES	SAMPLE LOCATION	WASTEWATER FLOW (GPD)		PRODUCTION DATA (SPECIFY UNITS)	
		Permit	Current	Permit	Current
1. Die Casting*	Regulated waste streams are not sampled prior to mixing with other waste streams	2,950 ⁺	~2,500 gpd (so far in 2012)	66,000 lbs /day	~87,000 lbs/day (2011 avg)
2. Die Maintenance*					
3. Cast Quench* (1/week)					
Total Regulated Process Flow		2,950⁺	~2,500 gpd	+ Flow is not limited.	
UNREGULATED PROCESSES				* Flows from these contributing sources are measured collectively.	
1. Parts Washing [#]	Unregulated wastestreams are not sampled prior to mixing with other waste streams	5,781 [#]	~2,600 gpd [‡]	Honda's permit application breaks down regulated flows as being: Die Casting = 359 gpd Cast Quenching = 230 gpd Mold Cooling = 2,364 gpd Total = 2,953 gpd	
2. Mop Station [#]					
3. Forging [#]					
Total Unregulated Process Flow		5,781[#]	~2,600 gpd[‡]		
DILUTE FLOW OPERATIONS				# Honda's permit application breaks down unregulated flows as being:	
1. Non-Contact Cooling Water	Dilute wastestreams are not sampled prior to mixing with other waste streams	150	Not measured	Die Maintenance = 241 gpd Machining Wash = 3,471 gpd Gear Mfg Wash = 2,069 gpd Total = 5,781 gpd	
2. Cooling Tower Blowdown ⁽⁴⁾					
3. Air Compressor Condensate ⁽⁵⁾					
Total of Dilute Flows	-	150	Not measured	‡ Calculated from total average measured flow divided by 5 days (since weekly wastewater flow is treated and discharged over one day) minus average measured regulated flow	
Sanitary		(2)	(2)		
TOTAL FLOW	Discharge from the Final Check Tank	8,881	4,700 gpd⁽³⁾		

- (1) These sources are classified as 'Unregulated' waste water for purposes of the CWF.
- (2) Sanitary wastewater is discharge through a separate sewer lateral.
- (3) Flows are based on 2011 self-monitoring data. Reported flows (~12,000 to 53,500 gpd with an average of ~33,000 gpd) are actually weekly cumulative flows with treatment and discharge typically occurring only Thursday through Friday (sometimes into Saturday). Weekly average daily flows are approximately 4,700 gpd. Flow from die casting operations (regulated processes) is an average daily value.
- (4) This source flows to a sanitary sewer that is not tributary to the monitored effluent.
- (5) This flow may be going away.

25. For the above flows not discharged to the POTW, list point of discharge and permit (if any). **None**

SELF MONITORING

26. Sample location(s) described in the facility's permit:
"Samples for outfall 1DP00009001 shall be collected at the discharge from the Effluent Collection Tank (T800)."
27. Is the facility sampling at the location(s) described in the permit? Y / N
 If no, describe the actual location:
28. Is the location(s) where the facility is sampling representative? Y / N
 If no, indicate a representative location:
29. Is the flow measured or estimated? Measured / Estimated
Using a magmeter
 If measured, how often is the meter calibrated?
Meter installed in 2008. 5-year calibration frequency. Just sent it out, are using in-line spare.
 If estimated, describe method of estimation:
30. Is pH monitored continuously? Y / N
 If yes, how often is the meter calibrated?
Once per month and just prior to discharge. Buffer solutions are onsite.
31. Does the facility collect its own samples? Y / N
 If no, specify the sample collector:
Nalco collects the sample. Sampling typically occurs from Thursday to Friday.
32. Are appropriate sampling procedures followed? Y / N
 Monitoring frequencies Y / N
 Sample collection (grab for pH, O&G, CN, phenols, VOCs) Y / N
 Flow proportioned samples (*the flow rate is constant throughout the day.*)* Y / N
 Proper preservation techniques (*although samples are not iced during collection*) Y / N
 Sample holding times Y / N
 Chain-of-custody forms Y / N
** When the discharge pump is energized, the sampler pulls a 100 ml aliquot every 10 minutes.*
33. Are samples analyzed in accordance with 40 CFR 136? Y / N
34. Laboratory conducting analyses: **MASI**

TOXICS MANAGEMENT

35. Are any listed toxic organics used in the facility?
If yes, identify organics: Y/N
36. Does the facility have a current toxic organic management plan(TOMP)? Y/N
If yes, is it being implemented? NA Y/N
37. Has the facility had any uncontrolled releases or spills to the POTW since the previous inspection? If yes, please explain: Y/N
38. Does the facility need a spill prevention plan or slug discharge control plan? Y/N
If yes, does the facility have a written plan? NA Y/N
39. Identify any potential slug load or spill areas:

None - all process wastewater is collected in tanks and discharge can only occur after passing through the UF system.

They maintain a storm water pollution prevention plan.

GENERAL OBSERVATIONS

1. ***Composite sampler is signaled when there is a discharge flow. So long as that signal is active, the sampler collects 100 ml aliquots every 10 minutes.***
2. ***Pallet washer flow has been determined to be approximately 1,800 gallons per month.***

REQUIRED FOLLOW-UP ACTIONS

Please see the inspection letter.